Amendments to the Specification

Please replace paragraphs [0119-0120] of the application as published with the following amended paragraph:

[0119] The calibration coefficient is then used to compensate for the distortion when the actual channel detection is performed. This is done by calculating the calibrated return loss ratio according to equation (4) below.

$$RL_c(j\omega_k)=10\log_{10}(C(k)*abs(X_{out\text{-}m}(j\omega))^2) \quad (4)$$

[0120] The structure of a receiver which measures the calibrated return loss is shown in FIG. 12. An analog-to-digital converter **202** digitizes the reflected signal on line **32** from the RF input of the TVR. Individual bandpass filters **204**, **206**, etc. have passbands each of which is centered on one probe frequency and a passband bandwidth set to filter out substantially all power other than that of the probe signal. Each bandpass filter output is coupled to the input of a circuit (usually implemented as an algorithm in a digital signal processor) like block **208** which calculates the square of the absolute value of the amplitude of the measured signal output from the bandpass filter so as to derive one of the terms $(abs(X_{out\text{-}m}(j\omega))^2)$ of equation (4) above. The resulting term is output in digital representation on line **212** and multiplied by the correction factor term C(k) for the particular probe signal involved. Thus, the term output on line **212** for probe signal **1** is multiplied in circuit **210** times the corrector factor for probe signal **1**. The circuits of FIG. 12 may be implemented in hardware or in software as algorithms executing one or more digital signal processors.